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Pred. No. is the score greater tand is derived derived is the number of results predicted by chance to have a ater than or equal to the score of the result being printed, rived by analysis of the total score distribution.

Novel human polynu	AAF66485	22	392	11.0	371.2	11	
Probe #22/25 used	AA154039	2 2 2	459	11.0	376.4	10	
Probe #9583 used t	AA140897	22	595	15.1	507.2		
Human colon cancer	AAH33745	22	609	17.2	577.2	7	
Interferon induced	AAS01152	22	3704	19.7	663	6	
Interferon induced	AAS01150	22	3692	19.7	663	5	
Interferon induced	AAS01151	22	1270	23.9	803	4	
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Human polynucleoti	AA161071	22	1382	39.1	1316.6	2	
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		124.6	141.8	144.6	144.6	144.6	144.6	144.6	144.6	145	145.8	145.8	145.8	145.8	145.8	145.8	163.4	167	174	178	194.4	217	229.6	252.8	252.8	252.8	269.2	281.4	281.4	281.4	285.4	356.8	365.8
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	Human cDNA sequenc	Melanoma different	Human genome fraqm	Oligonucleotide D1			Oligonucleotide D1	Oligonucleotide D1	Oligonucleotide D1	Probe #13693 for g	Oligonucleotide D1	Oligonucleotide D2		Oligonucleotide D1	Oligonucleotide Dl	Oligonucleotide D1	Human ORFX ORF2745	Probe #14224 for g	Probe #4495 for ge	Human cDNA sequenc	Probe #5040 for ge	Probe #22996 used	Probe #9957 used t	Probe #587 used to	Probe #605 used to		Human genome fragm	Probe #5618 used t	Probe #13794 used	Probe #9846 for ge	Melanoma different	Novel human polynu	EST clone CO522.

ALIGNMENTS

RESULT AAI59285 Human polynucleotide SEQ ID NO 1488. 22-OCT-2001 (first entry) AAI59285; AAI59285 standard; _ CDNA; 1557 ВP

Human; nootropic; immunosuppressant; cytostatic; gene therapy; cancer; peripheral nervous system; neuropathy; central nervous system; CNS; Parkinson's disease; Huntington's disease; haemostatic; amyotrophic lateral sclerosis; Shy-Drager Syndrome; chemotactic; leukaemia; ss chemokinetic; thrombolytic; drug screening; arthritis; inflammation.

Homo sapiens.

WO200153312-A1

26-JUL-2001.

26-DEC-2000; 2000WO-US34263.

21-JAN-2000; 25-APR-2000; 09-JUL-2000; 19-JUL-2000; 03-AUG-2000; 14-SEP-2000; 19-OCT-2000; 29-NOV-2000; 2000US-0488725. 2000US-055317. 2000US-0558042. 2000US-0620312. 2000US-063450. 2000US-0663191. 2000US-0693036. 2000US-0693034.

(HYSE-) HYSEQ INC

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Query Match
Best Local Similarity
Matches 1476; Conserv
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Matches 1355;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to human nucleic acids (AAI57798-AAI61369) and the encoded polypeptides (AAM38642-AAM42213) with nootropic, immunosuppressant and cytostatic activity. The polynucleotides are useful in gene therapy. A composition containing a polypeptide or polynucleotide in gene therapy is a composition of the peripheral nervous of the invention may be used to treat diseases of the peripheral nervous of the invention may be used to treat diseases of the peripheral nervous of the invention may be used to treat diseases of the peripheral nervous of the invention may be used to treat diseases of the peripheral nervous of the invention may be used to treat diseases of the peripheral nervous of the peripheral 
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nucleic acids and polypeptides are useful for treating or preventing a pathology associated with IFN polypeptide in a human. They are useful for determining the presence of or predisposition to a disease associated with altered levels of IFN polypeptide or polynucleotide. IFN nucleic acids, polypeptides and antibodies are useful for diagnosis, prevention or treatment of variety of immunological and cell proliferative disorders, such as autoimmune diseases e.g. lupus crythematosus, immunodeficiency diseases such as acquired immunodeficiency syndrome
                                                                                                                                                                                              New interteron induced polypeptides and diagnosis, prevention and treatment of i proliferative disorders, such as lupus e and Alyhpimer's disorses.
                                                                                                                                                                                                                                                                                                                                              (CURA-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Interferon induced nucleic acid; autoimmune disease; lupus erythematosus; immunodeficiency; stroke; acquired immunodeficiency syndrome; AIDS; graft rejection; viral infection; hepatitis; aplastic anaemia; cancer; human immunodeficiency virus; HIV; immune-mediated glomerulonephritis; haematologic disease; chronic neutropenia; myocardial infarction; neurological disease; Alzheimer's disease; parkinson's disease; tumour; neurological disease; Alzheimer's disease; parkinson's disease; tumour;
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Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     atrophy. IFN nucleic acids and polypeptides are also useful for identifying interferon-like proteins and interferon agonists, for screening drugs and compounds which inhibit or enhance IFN activity or function and as targets for the identification of small molecules that are immunostimulatory, immunosuppressive, or stimulate or suppress normal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             immunodeficiency virus (HIV), immune-mediated glomerulonephritis, haematologic diseases such as aplastic anaemia and chronic neutropenia and cancer. In addition they are also useful for treating or diagnosing various disorders associated with cell death, including myocardial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  infarction, stroke, neurological diseases including Alzheimer's and Parkinson's diseases, amyotrophic lateral sclerosis and spinal muscular
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20-OCT-1999;
20-JAN-2000;
         The sequence represents interferon induced nucleic acid, IFN6. IFN nucleic acids and polypeptides are useful for treating or preventing a pathology associated with IFN polypeptide in a human. They are useful for determining the presence of or predisposition to a disease associated with altered levels of IFN polypeptide or polypucleotide. IFN nucleic acids, polypeptides and antibodies are useful for diagnosis, prevention or treatment of variety of immunological and cell proliferative disorders, such as autoimmune diseases e.g. lupus erythematosus, immunodeficiency diseases such as acquired immunodeficiency syndrome (ALDS), graft rejection, viral infections including hepatitis and human immunodeficiency virus (HTV), immune mediated glomerulonephritis,
                                                                                                                                                                                                                                        New interferon induced polypeptides and diagnosis, prevention and treatment of i proliferative disorders, such as lupus and Alzheimer's disease
                                                                                                                                                                                                      Claim 9; Page 40-43; 134pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Interferon induced nucleic acid; autoimmune disease; lupus erythematosus; immunodeficiency; stroke; acquired immunodeficiency syndrome; AIDS; graft rejection; viral infection; hepatitis; aplastic anaemia; cancer; human immunodeficiency virus; HIV; immune-mediated glomerulonephritis; haematologic disease; chronic neutropaenia; myocardial infarction; neutrological disease; Alzheimer's disease; Parkinson's disease; tumour; neutrological disease; Alzheimer's disease; Parkinson's disease; tumour;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        screening drugs and compounds which inhibit or enhance IFN activity or function and as targets for the identification of small molecules that are immunostimulatory, immunosuppressive, or stimulate or suppress nor
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        nucleic acids and polypeptides are useful for treating or preventing a pathology associated with IFN polypeptide in a human. They are useful for determining the presence of or predisposition to a disease associated with altered levels of IFN polypeptide or polynucleotide. IFN nucleic acids, polypeptides and antibodies are useful for diagnosis, prevention or treatment of variety of immunological and cell proliferative diseases, such as autoimmune diseases e.g. lupus crythematosus, immunodeficiency diseases such as acquired immunodeficiency syndrome (AIDS), graft rejection, viral infections including hepatitis and human immunodericiency virus (HIV), immune-mediated glomerulonephritis, heematologic diseases such as applastic anaemia and chronic neutropenia and cancer. In addition they are also useful for treating or diagnosing various disorders associated with cell death, including myocardial
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20-OCT-1999;
20-JAN-2000;
                                                                                                                                                                                                                            The sequence represents interferon induced nucleic acid, IFN5. IFN
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Pred. No. 3.3e-1
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or treatment of variety of immunological and cell proliferative disorders, such as autoimmune diseases e.g. lupus erythematosus, immunodeficiency diseases such as acquired immunodeficiency syndrome (AIDS), graft rejection, viral infections including hepatitis and human immunodeficiency virus (HIV), immune-mediated glomerulonephritis, haematologic diseases such as aplastic anaemia and chronic neutropenia and cancer. In addition they are also useful for treating or diagnosing various disorders associated with cell death, including myocardial infarction, stroke, neurological diseases including Alzheimer's and Parkinson's diseases, amyotrophic lateral sclerosis and spinal muscular atrophy. IFN nucleic acids and polypeptides are also useful for care immunostification and as targets for the identification of small molecules that care immunostification and interferon agonists, for the identification of small molecules that the care immunostification of small molecules
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20-OCT-1999;
20-JAN-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          determining the presence of or predisposition to a disease associated with altered levels of IFN polypeptide or polynucleotide. IFN nucleic acids, polypeptides and antibodies are useful for diagnosis, prevention
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                                                                          are immunostimulatory, immunosuppressive, or stimulate or suppress normal
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       or tumour cell growth in mammals,
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| immunological, cell
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Sequence 3704 BP; 1168 A;

713 C; 809 G;

1014 T; 0 other;

WO200122920-A2

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                                                                                                                       AAH33745;
                                                                                                                                              AAH33745 standard;
                                          colorectal carcinoma;
                                                      Human; colon cancer;
                                                                           Human colon
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                                                                                                                                                                                                                Similarity
                                                                          cancer antigen
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                                                                                                 (first entry)
                                                                                                                                              cDNA;
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92.98;
                                                      colon
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                                                                          encoding cDNA SEQ ID NO:801.
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Pred. No. 3.
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                                                      antigen;
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                                                      diagnosis; detection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 3704;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   diagnosis and treatment of diseases associated with inappropriate P expression. For example, N and P may be used to treat disorders associated with decreased expression by rectifying mutations or deletions in a patient's genome that affect the activity of P by expressing inactive proteins or to supplement the patients own production of P. Additionally. N may be used to produce the colon cancer-associated Ps. by inserting the nucleic acids into a host cell and culturing the cell to express the proteins. N and P can be used in the prevention, diagnosis and treatment of colorectal carcinomas and cancers. AAH37196 to AAH37204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              present invention.

N.B. Pages 666 to 682 and page 7053 of the missing at time of publication, meaning no SEQ ID NO:1027 to 1052, 7921 and 7922.
                    3145
                                                                                                                                                                                                                                        2965
                                                                                                                                                                                                                                                                                                               2905
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cancer antigens have cytostatic activity and can be used in gene therapy and vaccine production. N and P may be used in the preventionagnosis and treatment of diseases associated with inappropriate P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAH32943 to AAH3/175 did Androssar to the cancer associated nucleic acid molecules (N) and proteins (P), where cancer associated nucleic acid molecules (N) and proteins (P), where
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAH32943 to AAH37195 and AAG73514 to AAG77788 represent human colon cancer-associated nucleic acid molecules (N) and proteins (P), where
                                                                                                                                                                                                                                                                                                                                                                                                                                                   2785 attttggaattacagatgcaaagtataatggaaaagaaaatgaaaaccaagagaaatatt 2844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      and AAB77789 represent sequences used in the exemplification of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 useful for preventing,
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                aataattcaacaaagaaacaatacaaaaagtgggtagaattacctatcacatttcccaat
                                                                                     gtgcacaaaggcttagatttgccttgtctcaaaataaggaattttgtagtqgttttcaaa
                                                                                                                                                                                                                    | CCagaattcaaggaactttacattgtaagagaaaacaaagcactgcaaaagaagtgtgcc
                                                    gtgcacaaaggcttagatttgccttgtctcaaaataaggaattttgtagtggttttcaaa
                                                                                                                          gactatcaaataaatggtgaaatcatctgcaaatgtggccaggcttggggaacaatgatg
                                                                                                                                                              gactatcaaataaatggtgaaatcatctgcaaatgtggccaggcttggggaacaatgatg
                                                                                                                                                                                                 ccaqaattcaaggaactttacattgtaagagaaaacaaarcactgcaaaagaagtgtgcc
                                                                                                                                                                                                                                                                      ctagcctgttctggggaagatatccatgtaattgagaaaatgcatcacgtcaatatgacc
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                                                                                                                                                                                                                                                                                                                                             gccargcattmcargaatamcccatcactaataactttcctttgcaaaaactgcagtgtg
                                                                                                                                                                                                                                                                                                                                                                                                                    2001-235357/24
1; Page 2766; 9803pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                      acids encoding
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  B₽;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  229 A; 90 C; 104 G; 174 T;
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98.6%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          7;
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Pred. No. 2.6e-133;
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and/or treating colorectal cancers -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 and/or treating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Rosen CA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
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177 tgggtattecaeagaegagaattteegetateteatetegtgetteagggeeagggtgaa

acaacagcaccatctqcttqqqaqaaccctctccctttctctqagaaaqaaqatqtcgaa 176

595

Best Query Match

Local

Similarity

15.1%; 99.4%;

509;

Conservative

0;

Score 507.2; Pred. No. 5.9e 0; Mismatches

.9e-116;

indels Length

Gaps

0;

ВП

595; 0;

507.2; No. 5.9

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AAI40897/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              26-MAY-2000;
30-JUN-2000;
03-AUG-2000;
                                                      The present sequence is one such probe. The probes are useful for producing a microarray for predicting, measuring and displaying grounding in samples derived from human placenta. The probes are for antenatal diagnosis of human genetic disorders.
                                                                                                                                                                                                                                                                                                                                                                                       HPI;
                                                                                                                                                                                                                                                                                                  analyzing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         genetic disorder;
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Sequence 595
                                                                                                                                                                                                                                     Claim 25; SEQ ID No 9583; 654pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Penn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21-SEP-2000;
27-SEP-2000;
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                                                                                                                                                                                                                                                                                                                                Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (MOLE-)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              09-AUG-2001.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Probe; microarray; human; placenta; antenatal diagnosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            545
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                                                                                                                                                                              present invention relates to single exon nucleic acid probes (SENP).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 agaactgacataagaatcaataaaatgattgttttactctg 3365
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                                                                                                                                                                                                                                                                                                                                                                                       2001-488897/53
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                                                                                                                                                                                                                                                                                               genome-derived single exon nucleic acid zing gene expression in human placenta -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              #9583 used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOLECULAR DYNAMICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2000US-0180312.
2000US-0207456.
2000US-0608408.
2000US-0632366.
2000US-0234687.
2000US-02346359.
2000US-0236359.
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BP; 141 A; 162 C; 154 G; 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           to measure gene expression in human placenta
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0 other;
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AAIS4039/c
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DE Probe;
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                                                                                                  26-MAY-2000;
30-JUN-2000;
03-AUG-2000;
21-SEP-2000;
27-SEP-2000;
The
                             Human genome-derived single exon nucleic acid probes
                                                                                                                                                                                                               genetic disorder;
             Claim 25; SEQ ID No 22725; 654pp; English.
                             analyzing
                                                                Penn
                                                                                                                                       04-FEB-2000;
                                                                                                                                                      30-JAN-2001;
                                                                                                                                                                     09-AUG-2001.
                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                     Probe; microarray; human; placenta; antenatal diagnosis;
                                                                                                                                                                                                                                                   17-OCT-2001
                                                                                                                                                                                                                                                                  AAI54039;
                                                                                                                                                                                                                                                                               AAI54039 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   415
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present invention relates to
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                                                                SG,
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                                                                                                                                                                                                                                                                                                                                               CACTCTGGTGGACAAGCTTCTAGTTAGAGACGTCTTGGATAAGTGCATGGAGGAGGAACT
                                                                                                                                                                                                                                                                                                                                                       cactctggttggacaagctfcfagttagagacgtcttggataagtgcatggaggaggaact
                                                                                                                                                                                                                                                                                                                                                                            CTCTCCATCGTTTGAGAACGCTCATGATGAATATCTCCAACTGCTGAACCTCCTTCAGCC
                                                                                                                                                                                                                                                                                                                                                                                                        CCGGAGAACCGGCAGCCCTCTGGCCGCCCGCTACATGAACCCTGAGCTCACGGACTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                     GAGCACCTTGGAGAAGGGAGTCTGGCACCTTGGTTGGACTCGGGAATTCGTGGAGGCCCT
                                                                               MOLECULAR DYNAMICS INC
                                                                Hanzel DK,
                             gene
                                                                                           2000US-0180312.
2000US-0207456.
2000US-0608408.
2000US-0632366.
2000US-0234687.
2000US-02346359.
2000US-0236359.
                                                                                                                                                                                                                                     used
                                                                                                                                                      2001WO-US00663
                                                                                                                                                                                                                                                  (first entry)
                            expression
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                                                                Chen W,
                                                                                                                                                                                                                                                                                499
                           in human placenta
                                                                                                                                                                                                                                                                                ВP
                                                                                                                                                                                                                                    gene
                                                                Rank
single exon nucleic
                                                                                                                                                                                                                                   expression in human placenta sample
                                                                DR;
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acid
                                   useful
probes (SENP).
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The present sequence is one such probe. The probes are useful for producing a microarray for predicting, measuring and displaying grexpression in samples derived from human placenta. The probes are for antenatal diagnosis of human genetic disorders.
                                                               02-FEB-2000;
                                                                                                                                                                                    aging process; type I interferon;
                                                                                                                                                                                     cellular senescence; terminal differentiation; growth suppression; aging process; type I interferon; cancer cell; tissue regeneration; ss
                                                                                                                                                                                                                                                 Nucleotide sequence of a human OLD-139 polynucleotide
                                                                                                                                                                                                                                                                                  02-JAN-2001
                                                                                                                                                                                                                                                                                                                                              AAA64601 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 499
(UYCO ) UNIV COLUMBIA NEW YORK
                                                                                              10-AUG-2000
                                                                                                                         WO200046391-A2
                                                                                                                                                                                                                    OLD-35; OLD-64; OLD-137; OLD-139; OLD-142; OLD-175; cancerous phenotype;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cttcagcccactctggtggacaagcttctagttagagacgtcttggataagtgcatggag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cal Similarity
457; Conserv
                                                                                                                                                        sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                           GAGGAACTGTTGACAATTGAAGACAGAAACCGGGTAGGTG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATGTCGAATGGGTATTCCACAGACGAGAATTTCCGCTATCTCATCTCGTGCTTCAGGGCC 440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                               2000WO-US02920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP; 116 A; 142 C;
                                                                                                                                                                                                                                                                                  (first entry)
                              9908-0243277
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99.3%;
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Pred. No. 4.2e-103;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             126 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             115 T;
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Leszcyniecka

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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            the cancerous phenotype of a cancer cell, determining if a cell is senescent, growth arrested or terminally differentiated. They are also useful for reversing the aging process in a cell adaptostic indicator of cellular senescence, terminal differentiation and/or growth suppression and as a marker to identify drugs or small molecules that will induce or inhibit cellular senescence or terminal differentiation and type I interferons. The combination of Old-35 with other interacting proteins is useful for targeting the differentiation of specific cells. Old-35 can be used to selectively stabilize specific meNAS containing adenoviral
                    Human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 3209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3149
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       rich 3' UTRs. The OLD proteins are useful for reversing the cancerous phenotype of a cancer cell and inhibiting the growth of a cancer cell. They are also useful for regenerating tissue. The present sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 4; Page 101; 115pp; English
breast cancer; lung cancer; cancer detection;
                                                       Novel human polynucleotide, SEQ ID NO:
                                                                                               09-APR-2001
                                                                                                                                                                     AAF66485 standard; cDNA; 392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          represents an OLD-139 polynucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Novel isolated nucleic acid encoding an OLD-35 or OLD-64 protein useful in the treatment and detection of e.g. cancer and diseases involving
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                360
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               specification describes OLD-35, OLD-64, OLD-137, OLD-139, OLD-142 OLD-175 proteins. The OLD nucleic acids are useful for reversing
                                                                                                                                                                                                                                                                           ctgacataagaatcaataaaatgattgttttactctg 3365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       aattcaaggaactttacattgtaagagaaacaaagcactgcaaaagaagtgtgccgact 3028
                                                                                                                                                                                                                                                                                                                                                                                                                            attraacaaagaaacaatacaaaaaqtgggtagaattacctatcacatttcccaatcttg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        acaaaggcttagatttgccttgtctcaaaattagggaattttgtagtggttttcaaaaata 3148
                                                                                                                                                                                                                                                                                                                                                  aaatactatcagttaaacatttaatatgattatgattaatgtattcattatgctacagaa
                                                                                                                                                                                                                                                                                                                                                                                                           atcaaataaatggtgaaatcatctgcaaatgtggccaggcttggggaacaatgatggtgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               atcaaataaatggtqaaatcatctgcaaatgtggccaggcttggggaacaatgatggtgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    aatteaaggaaetttaeattgtaagagaaaaeaaaaeactgcaaaagaagtgtgeegaet 60
                                                                                                                                                                                                                                                            ctgacntangaatcantaaaangatngttttactctg
                                                                                                                                                                                                                                                                                                                                 aaatactatcagttaaacatttaatatgattatgattaatgnattcattatgctncag-a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 atteaacaaagaaacaatacaaaaagtgggtagaattacctatcacatttcccaatctty
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       acaaaggcltagatttgccttgtctcaaaataaggaattttgtagtggttttcaaaaata
                    cytostatic; gene therapy; colon cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         458
                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
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97.7%;
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                                                                                                                                                                     ВP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     G; 129 T; 9 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.4e-83;
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            to produce probes for detection of mRNA and to produce additional copies of the polynucleotides. The probes can be used for chromosome mapping of the polynucleotide and for detection of transcription levels. Ribozymes or antisense oligonucleotides can be generated. The polynucleotides and their gene products are used as genetic or blochemical markers (e.g. in blood or tissues) that will detect the earliest changes along the carcinogenesis pathway and/or monitor the efficacy of therapies and preventive interventions. The polynucleotides, polypeptides and antibodies against them can be used in pharmaceutical compositions to treat the cancers and proliferative disorders such as neoplasia,
                                                                                                                                                                                                          2784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Library of polynucleotides for diagnosing a cancerous state mammalian cell and detecting cancer, particularly of the colprostate, comprises 3351 human polynucleotide sequences -
                                                                                                                                                                                                                                                                                                                     2664 ggttgctcacaqtggttcaggagttalcgaacatgaqacagttaatgatttccqagagaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   polynucleotides. The library is used to detect differentially expressed genes correlated with a cancerous state of a mammalian cell and can detect colon, prostate, breast and lung cancer. The library can be used detect colon, prostate, breast and lung cancer additional contents.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 02-JUL-1999;
02-JUL-1999;
                                                                                                                                                                                                                                                       2724 gatgatgtataaagctatacattgtgttcaaaatatgaaaccagaggagtatgctcataa
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present sequence is one of 3351 sequences in a library of human polynucleotides. The library is used to detect differentially expressed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2001-091805/10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Crkenjakov R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Williams LT,
Reinhard C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (CHIR ) CHIRON CORP. (HYSE-) HYSEQ INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO200102568-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  30-JUN-2000; 2000WO-US18374
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                                                             gctagcctgttctggggaagatatccatgtaattgagaaaatgcatcacgtcaatatgac
                                                                                                                                           tgccaagcattacaagaataacccatcactaataactttcctttgcaaaaactqcagtgt
                                                                                                                                                                                           ggttgctcacagtggttcacgagttatcgaacatgatacagttaatgatttccgagagaa
              cccagaattcaaggaactttacattgtaagagaaaacaaagcactgcaaaagaagtgtgc
                                                                                                                                                                         gattttggaattacagatgcacagtataatggaaaagaaaatgaagaccaagagaaatat
                                                                                                                                                                                                                                          gatgatgtataaagctatacattgtgttcaaaatatgaaaccagaggagtatgctcataa
                                            gctagcctgttctggggaagatatccatgtaattgagaaaatgcatcacqtctatatgac
tgccaagcattacaagaataacccatcactaataactttcctttgcaaaaactgcagtgt
                                                                                                                                                                                                                                                                                                                                                                      376;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9; Page 871; 1046pp; English
                                                                                                                            OV R, Drmanac S, Garcia V, Jones
                                                                                                                                                                                                                                                                                                                                                                                                                                                   392
                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                   BP; 148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Escobedo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99US-0142311
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                                                                                                                                                                                                                                                                                                                                                                                    11.0%;
97.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; 65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Kennedy GC,
Dickson M,
S LW, Strache-
                                                                                                                                                                                                                                                                                                                                                                                                                                                 c;
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                                                                                                                                                                                                                                                                                                                                                                                    Score
Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   82
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                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                 G;
                                                                                                                                                                                                                                                                                                                                                                                  371.2;
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Pot D, L
Labat I,
le-Crain B;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                     5e-82;
                                                                                                                                                                                                                                                                                                                                                                                                   DB 22; Length 392;
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D, Lamson
Tesh
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                               δÃ
                                                                Дb
                                                                                            9
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                                                                                                                             Matches 367;
                                                                                                                                                                                                                                                                               The present sequence represents a human expressed sequence tag (EST). The polynucleotide, which is a secreted EST, and the encoded protein are predicted to have useful biological activities which would make them suitable for treating, preventing or ameliorating medical conditions in humans and animals, although no supporting data is given. Suggested activities include nutritional activity, immune stimulating or suppressing activity, haematopolesis regulating activity, tissue growth activity, activin/inhibin activity, chemotactic/chemokinetic activity, haemostatic and thrombolytic activity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New polynucleotides encoding human secreted proteins - derived from e.g. human blood, kidney, foetal lung, placenta, testes, brain, ovary, pituitary, retina and colon cDNA libraries.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; secreted protein; expressed sequence tag; EST; haematopoiesis; tissue growth; activin; inhibin; chemotaxis; chemokinesis; haemostatic; receptor; ligand; thrombolytic; anti-inflammatory; cadherin; anti-tumour;
                1824 gaaacttctagaaataatgacaaggattcaaacttattgtcaaatgagtccaatgtcaga 1883
                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                     activity, receptor/ligand activity, anti-inflammatory activity,
cadherin/tumour invasion suppressor activity, tumour inhibition
                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1999-070077/06
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAV89625 standard; cDNA; 374 BP
                                                                                                                                                                                                                                    activity. The polynucleotide may also be useful for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15-OCT-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gene therapy; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EST clone CO522
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       10-APR-1998;
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   62
                                                                                                                                             Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cccagaattcaaggaactttacattgtaagagaaaacaaagcactggcaaagaagtgtgc 367
                                                            gaaacttctagaaataatgacaaggattcaaacttattgtcaaatgagtccaatgtcaga 61
Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                             Page 277; 618pp; English.
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                                                                                                                                                                                                          374 BP; 146 A; 47 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          J, Jacobs K,
Spaulding V,
                                                                                                                             Conservative
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                                                                                                                                        10.9%;
99.5%;
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                                                                                                                             0;
                                                                                                                        Score 365.8; DB 20;
Pred. No. 5.4e-81;
Pred. No. 5.4e-81;
                                                                                                                                                                                                          88
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                                                                                                                                                                                                          93 T;
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                                                                                                                                                                                                     0 other;
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AAF66499
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                                                                                 The present sequence is one of 3351 sequences in a library of human polynucleotides. The library is used to detect differentially expressed genes correlated with a cancerous state of a mammalian cell and can detect colon, prostate, breast and lung cancer. The library can be used to produce probes for detection of mRNA and to produce additional copies of the polynucleotides. The probes can be used for chromosome mapping of the polynucleotide and for detection of transcription levels. Ribozymes or antisense oligonucleotides can be generated. The polynucleotides and their gene products are used as genetic or blochemical markers (e.g. in the polynucleotides are used as genetic or blochemical markers (e.g. in
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preventive interventions. The polynucleotides, polypeptides
                               blood or tissues) that will detect the earliest changes along the carcinogenesis pathway and/or monitor the efficacy of therapies and
                                                                                                                                                                                                                                                                                                                                                                                                   Claim 9; Page 874; 1046pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            prostate, comprises 3351 human polynucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Library of polynucleotides for diagnosing a cancerous state of mammalian cell and detecting cancer, particularly of the colon
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02-JUL-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
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Dickson M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Kennedy GC, Pot D, I
Dickson M, Labat I,
LW, Strache-Crain B;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Garcia PD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                            sequences
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Best Local Sim
Matches 364;
New method for generation of subtracted cDNA libraries - used partic, for identifying melanoma differentiation associated genes for cancer study, diagnosis and therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2182
                                                WPI; 1995-178878/23
                                                                                                                                                             24 - OCT - 1994;
                                                                                                                                                                                   04 - MAY - 1995
                                                                                                                                                                                                                                                                   Melanoma differentiation associated
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                                                                                                                                                                                                                                                                                                                      27-OCT-1995
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                                                                         Figher PB,
                                                                                              (UYCO ) UNIV
                                                                                                                         27-OCT-1993;
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                                                                                                                                                                                                                                 Homo sapiens
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                                                                                                 COLUMBIA NEW YORK
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93US-0143576.
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Best Local Similarity
Matches 297; Conserv
                                                    04-FEB-2000;
26-MAY-2000;
30-JUN-2000;
03-AUG-2000;
21-SEP-2000;
27-SEP-2000;
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                                                                                                                                                                                                                                                                                     Probe; human; microarray; gene expression; cervical epithelial cell;
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                                                                                                                                                                                     09-AUG-2001
                                                                                                                                                                                                                                                                        cervical cancer; ss
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            (MOLE-) MOLECULAR DYNAMICS INC
                                                                                                                                                         30-JAN-2001;
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                                     2000US-0180312.
2000US-0207456.
2000US-0608408.
2000US-0632366.
2000US-0234687.
2000US-0236359.
2000US-0234263.
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                                                                                                                                                         2001WO-US00670
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Pred. No. 4.2e
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PI Penn SG, Hanzel DK, Chen W, Rank DR;

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WHI: 2001-488901/53.

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Human genome-derived single exon nucleic acid probes useful for property analyzing gene expression in human cervical epithelial cells.

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Claim 25; SEQ ID No 9846; 487pp; English.

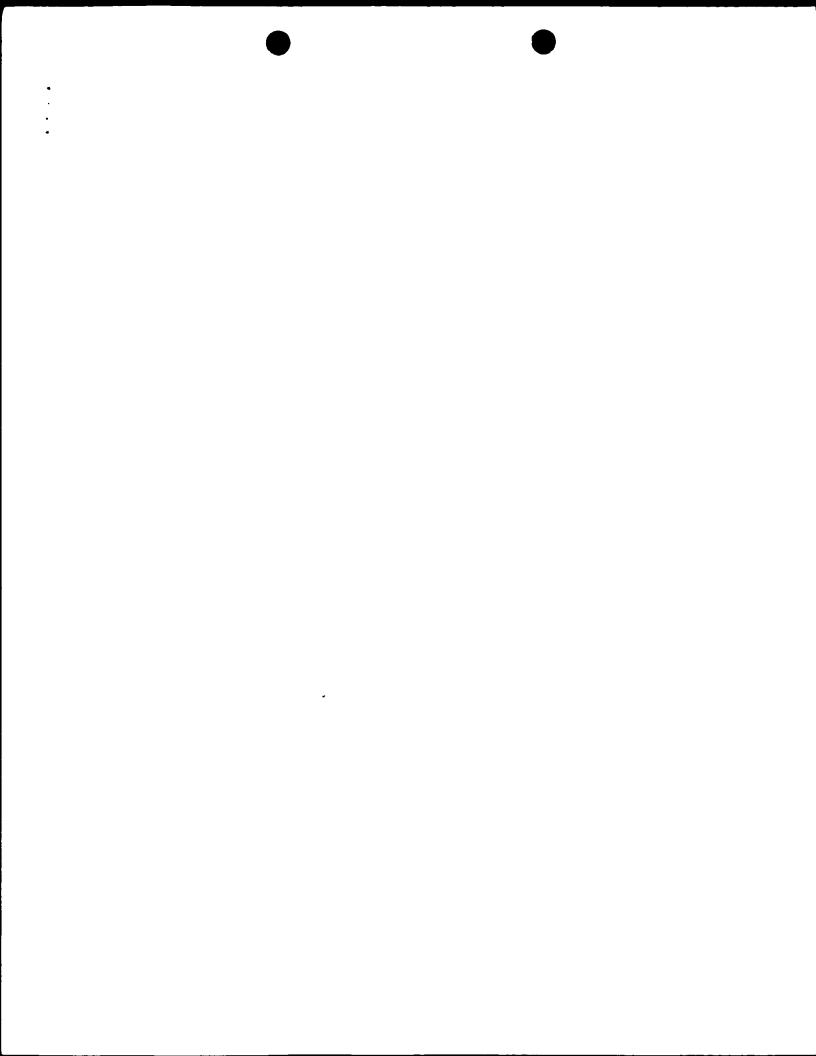
XX

The present invention relates to human single exon nucleic acid probes (SENP). The present sequence is one such probe. The SENPs are derived from human HeLa cells. The SENPs can be used to produce a single exon cc sample derived from human cervical epithelial cells. By measuring pene cc expression, the probes are therefore useful in grading and/or staging confidences of the cervix, notably cervical cancer.

CC Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at fire the sequence 292 BP; 108 A; 31 C; 71 G; 82 T; 0 other;
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            2174 tggatgaaacagatagatttctcattgactttatttttttgaaaacaataaaa 2224
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tggatgaaacagatagatttctcatgactttattttttggtaagattcaaa
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97.9%;
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Wearch completed: January 17, 2002, 03:26:40



Run

Result

Query

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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
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Gapop 10.0 , Gapext 1.0
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3365
1 gcgcgccggcctga
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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ALIGNMENTS

RESULT

AUTHORS TITLE	REFERENCE	JOURNAL		TITLE	AUTHORS	REFERENCE			ORGANISM	SOURCE	KEYWORDS	VERSION	ACCESSION		DEFINITION	LOCUS	AF095844
Kang,DC. and Fisher,P.B. Direct Submission	2 (bases 1 to 3380)	Unpublished	inducible gene of limited homology to RNA helicase	Melanoma differentiation associated gene-5 (mda-5), an interferon	Kang, DC. and Fisher, P.B.	1 (bases 1 to 3380)	Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;	Homo sapiens	human.		AF095844.1 G1:11344593	AF095844	mRNA, complete cds.	Homo sapiens melanoma differentiation associated protein-5 (MDA5)	AF095844 3380 bp mrnA PRI 26-NOV-2000	

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                                                  ACCTTGGAGAAGGGAGTCTGGCACCTTGGTTGGACTCGGGAATTCGTGGAGGCCCTCCGG
                                                                accttggagaaqggagtctggcaccttggttggactcgggaattcgttggaggccctccgg
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llarity 100.0%;
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CSGEDLHVIEKHHVNNFPERKELJIVEBENKALOKCADYQINGEIICKGGADAGTMM
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Submitted (09-JAN-2001) Laboratoire d'Immunologie Moleculaire
l'Infection et de l'Inflammation, Institut Pasteur de Lille, 1
du Professeur Calmette BP 245, Lille 59019, France
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//db_xref="GI:12621066"
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//tabslation="MSNCYSTDENFRYLISCFRAHVKMYIQVEPVLDYLTFIPAEVKE
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NEKFAEVGVKAHHLIGACHSSESKPMTQNGOKEVISKFRTGKINLLIATTVAEEGLDI
KECNIVIRYGLLVTNEIAAVQARGRARADESTYVLVAHSGSGVIERETVNDFREKMMYK
AIHCVQNMKPEEVAHKILELOMQSIMEKKMKTKRNIAKHYKNNPSLITFLCKNGSVA
CSGEDIHVIEKMHYNMTPEFKELYIVERNKALLOKKADTOQINGEIICKCGQAWGTMM
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                                    cacagtggcagaaggaaggtctggatattaaaggaatgtaacattgttatccqttatggtct
                                                                   gagtgcatatgcgctttcccagtggattactgaaaatgaaaaatttgctgaagtaggagt
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NIH-MGC Project URL: http://mgc.nci.nih.gov
Contact: MGC help desk
Email: cgapbs-r@mail.nih.gov
                                       Gene Collection (MGC), Institute, 31 Center D
                                                                                                                                                            Homo sapiens,
BC007966
                                                          Submitted (11-MAY-2001)
                                                                    Direct Submission
                                                                                Strausberg, R.
                                                                                                   Mammalia;
                                                                                                            Eukaryota;
                                                                                                                     Homo sapiens
                                                                                                                                                   BC007966.1
                                                                                                                                                                                 BC007966
                                                                                       karyota; Metazoa;
mmalia; Eutheria;
(bases 1 to 1213)
                                                                                                                                                  GI:14044090
                                                                                                                                                                     1213 bp
, clone I
                                                                                                 Chordata;
Primates;
                                                                                                                                                                      IMAGE: 4304805,
                                        Drive,
                                                  Cancer
                                                National Institutes of Health, Mammalian Cancer Genomics Office, National Cancer
                                                                                                                                                                                 mRNA
                                        Room
                                                                                                   Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
                                        11A03,
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                                       Bethesda, MD 20892-2590,
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Gaithersburg, Maryland;
Web site: http://www.
Contact: nisc_mgc@nh
Shevchenko,Y., Wetherby,K.E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Contact: nisc_mgc@nhgri.nih.gov
Shevchenko,Y., Wetherby,K.D., Beckstrom-Sternberg,S.M.,
Benjamin,B., Blakesley,R.W., Bouffard,G.G., Brinkley,C., Brooks,S.,
Benjamin,B., Blakesley,R.W., Bouffard,G.G., Brinkley,C., Brooks,S.,
Dietrich,N.L., Guan,X., Gupta,J., Ho.S.-L., Karlins,E., Legaspi,R.,
Lim,M., Maduro,Q.L., Masiello,C., Mastrian,S.D., McCloskey,J.C.,
McDowell,J., Pearson,R., Snyder,B., Stantripop,S., Thomas,P.J.,
McDowell,J., Pearson,R., Snyder,B., Stantripop,S., Walker,M.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Clone distribution: MGC clone distribution information can be fo through the I.M.A.G.E. Consortium/LLML at: http://image.llnl.gov Series: IRAL Plate: 20 Row: p Column: 10 This clone was selected for full length sequencing because it passed the following selection criteria: Hexamer frequency ORF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Tissue Procurement: ATCC cDNA Library Preparation: Rub cDNA Library Arrayed by: The DNA Sequencing by: National I
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/db_xref."taxon:9606"
/clone="IMAGE:4304805"
/tissue_type="Uterus, leiomyosarcoma"
/clone_lib-"NIH_MGC_46"
/lab_host-"DH10B-R"
/note-"Vector: poTB7"
6 a 247 c 285 g 295 t
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Pred. No. 3e-2
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The I.M.A.G.E. Consortium (LLNL)
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                NIH-MGC Project URL: http://mgc.nci.nih.gov
Contact: MGC help desk
Email: cgapbs-r@mail.nih.gov
                                                                                      Submitted (28-FEB-2001) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                          Direct Submission
                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciuroqnathi; Muridae; Murinae; Mus 1 (bases 1 to 2050)
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BC004031
Tissue Procurement: Gilbert Smith,
                                                                                                                                                             Strausberg, R.
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                        tcagattttggaactcaaccctatgaacaatgggccattcaaatggaaaaaaagctgca 1938
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Sequencing Group at the Stanford Human Genome
Center, Stanford University School of Medicine, Stanford, CA 94
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VNDFREKMMYKAINRVQNMKPEEYAHKILELQVQSILEKKMKVKRSIAKQYNDNPSLI
TLLCKNCSMLVCSGENIHVIEKMHHVNMTPEFKGLYIVRENKALQKKFADYQTNGEII
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/product="Ouknown (protein for IMAGE:3495361)"
/protein_id="AAH04031.1"
/protein_id="AAH04031.1"
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/translation="ANLDAFTIKTVKENLGQLKHQIKEPCKKFVIADDTRENPFKEKL/
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STYALSQWIMENAKFAEVGVKAHHLIGAGHSSEVKPMTQTEGKEVISKFRTGSINLLI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note-"Vector: pCMV-SPORT6" <1. .1545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /tissue_type="Mammary tumor metastatized to lung. Tumor arose spontaneously from a senescent normal mammary (clonal) outgrowth infected with the virus MMTV." /clone_lib="NCI_CGAP_Lu29" /lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LYSDED"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /db_xref="taxon:10090"
/clone="IMAGE:3495361"
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(Dickson, Mark) mcd@paxil.stanford.edu
M., Schmutz, J., Grimwood, J., Rodriquez, A.,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae
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APSAWENPLPSLRKKDVEWVFHRREFPLSHLVLOGOGENVHPEVKEQIORTVARTSGNM
QAVELLLSTLEKGVWHLGWTREFVEALRRTGSPLAARYMNPELTDLPSPSFENAHDEY
LOLLNLLOPTLVDKLLVRDVLDKCMEEBLLT IEDHNRIAAAENNGNESGVRELLKRIV
QKENWFSAFLNVLRQTGNNELVQELTGSDCSESNAGICNFTEEDSSNSA"
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/db_xref-"GI:13515376"
/translation-"MPAAMVNSNTTPRRDVIKSPPVAQSGRPCFSKWAADSGTHISPV
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                       Direct Submission
Submitted (30-SEP-2000) Department of Genetics,
University, 4444 Forest Park Avenue, St. Louis,
On Mar 15, 2000 this sequence version replaced g
                                                                                                                            Direct Submission
Submitted (15-MAR-2000)
University School of Med
                                                                                                                                                                                                                   Submitted (25-SEP-1999) Genome Sequencing Center, Washington University School of Medicine, 4444 Forest Park Parkway, St.
                                                                                      Waterston, R.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The clone sequenced to the left is RP11-576116, 200 bp overlap; the clone sequenced to the right is RP11-204024. Actual start of this clone is at base position 126545 of RP11-576116; actual end is at base position 81443 of RP3-404K21.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        This sequence was finished as follows unless otherwise noted:
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Contact: sapiens@watson.wustl.edu
-------Summary Statistics
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8919. .8968
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11237. .11409
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7585. .7694
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mp78b04.r1"
6509. .6710
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27052
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26756
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24002
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23662
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/rpt_family="MalR"
27157. .27613
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /rpt_family="AT_rich"
17142. .17190
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13371. .13454
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22566. .22843
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nc22c08.rl"
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                                                                                                                                                rpt_family="AT_rich"
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repeat_region

/rpt_family="Malk" 27897. .28473

/rpt_family="Malk"

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31581. .31607
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32711. .32850
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Pred. No. 2.2e-121;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gattttggaattacagatgcaaagtataatggaaaagaaaatgaaaaccaagaqaaatat 2843
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCCAGAATTCAAGGAACTTTACATTGTAAGAGAAAACAAAGCACTGGCAAAGAAGTGTGC
                 Human genes and gene expression products Patent: WO 0102568-A 2255 11-JAN-2001;
                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostom Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 387)

Williams, L.T., Escobedo, J., Innis, M.A., Garcia, P.D., Klinger, J. Kassam, A., Reinhard, C., Randazzo, F., Kennedy, G.C., Pot, D., Lamson, G., Drmanac, R., Crkenjakov, R., Drmanac, S., Dickson, M., Labat, I., Leshkowitiz, D., Kita, D., Garcia, V. and Strache-Crain,
                                                                                                                                                                                                                                                                                                                                      Sequence 2255
AX071783
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Lamson,G., Drmanac,R., Crkenjakov,R., Drmanac,S., Dickson,M.,
Labadt,I., Leshkowitiz,D., Kita,D., Garcia,V. and Strache-Crain,B.
Human genes and gene expression products
Patent: WO 0102568-A 2241 11-JAN-2001;
CHIRON CORPORATION (US) ; HYSEQ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CHIRON CORPORATION (US); HYSEQ, INC. (US) Location/Qualifiers
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1 (bases 1 to 392)
Williams, L.T., Escobedo, J.,
                                                                                                                                                                                                                                       Homo sapiens
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65 c 82 g
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97.9%;
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Pred. No. 3.1e-68;
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                                                                                                                                                                                                                 Euteleostomi;
                                                                                                                                      Klinger,J.,
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                                    Submitted (22-OCT-1999) Genome Sequencing Center, Washington University School of Medicine, 4444 Forest Park Parkway, St.
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Submitted (05-JUN-1999) Genome
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Waterston, R.H.
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Sulston, J.E. and Waterston, R.
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Homo sapiens BAC clone
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                                                                                                                                                                       Sequencing Center, Washington 4444 Forest Park Parkway, St.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The RPCI-11 human BAC library was made from the blood of one male donor, as described by Osoegawa,K., Woon,P.Y., Zhao,B., Frengen,E., Tateno,M., Catanese,J.J. and de Jong,P.J. (1998) An improved approach for construction of bacterial artificial chromosome libraries. Genomics 51:1-8. The clone may be obtained either from propagate for the first voges of the libraries.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Submitted (02-0CT-2000) Department of Genetics, Washington University, 4444 Forest Park Avenue, St. Louis, Missouri 6 On Oct 22, 1999 this sequence version replaced gi:5103889.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mapping information for this clone was provided by Dr. John D. McPherson, Department of Genetics, Washington University, St. Louis MO. For additional information about the map position of this
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NOTICE: This sequence may not represent the entire insert of this clone. It may be shorter because we only sequence overlapping clone sections once, or longer because we provide a small overlap
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Waterston, R.
Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The clone sequenced to the left is RP11-178A14. Actual start of this clone is at base position 1 of RP11-576I16; actual end is at base position 1636B1 of RP11-576I16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Research Genetics, Inc. (http://www.resgen.com) or Pieter de Jong and coworkers at the Roswell Park Cancer Institute
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MAPPING INFORMATION:
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Contact: sapiens@watson.wustl.edu
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                /rpt_family="(CA)n"
5417, .5649
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                                                                                                       /rpt_family="MER1_type" 5128. .5148
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1271. .1298
                                                                                                                                                                                                                                                                                                                                                                       /clone_lib="RPCI-11"
216. .322
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/chromosome="2"
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8702. .9187
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20851. .20910
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21204. .21219
/note="match to EST AI582416 (NID:g4568313) tr97d11.x1"
21204. .21219
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21204. .21219
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20563. .20850
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16284.
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14437. .1457^
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17644. .18442
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16140, .16281
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15713. 15993
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15449. ,15475
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14742. .14887
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13833. .14130
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13134
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5. .16997
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6. 15695
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9. .13133
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4. .16327
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4. .13419
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                                                                                                                            family-"MER2_type"
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REFERENCE
AUTHORS
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SOURCE
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            BASE COUNT
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                                                                                                                                                                                                                                                              RESULT 13
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                                       source
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                                                                                                         1 (bases 1 to 301)
Fisher, P.B. and Jiang, H.
                                                                                                                                                    Unknown
                                                                   Patent: US 5643761-A 7 01-JUL-1997;
                                                                             Method for generating a subtracted cDNA library and generated library
                                                                                                                                    Unclassified.
                                                                                                                                                                 Unknown
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23919
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24730. .25234
/note="match to EST A1682793 (NID:q4892975) wc66d05.x1"
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23343. .23397
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            /organism="unknown"
61 c 56 g
                                                   Location/Qualifiers
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|9. .23983
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                                                                                    agccaaagctgaagaacacattttaaaactatgtgccaatcttgatgcatttactattaa 1724
                                                                                                                                      tgccattgcagatgcaaccagagaagatccatttaaagagaaacttctagaaataatgac 1844
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                                     aactgttaaaqaaaaccttgatcaactgaaaaaccaaatacaggagccatgcaagaagtt 1784
                                                                                                                                                                                                                                                                                                                                                                                                       1 (bases 1 to 377)
Sibson,D.R. and Gross,J.
HUMAN NUCLEIC ACID FRAGMENTS, ISOLATED FROM
PLACENTA OR BONE NARROW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 240 from A74554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     unidentified
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                                                                                                                                                                                                                                                                                                                                                                              Patent: WO 9401548-A 240 20-JAN-1994; MEDICAL RES COUNCIL (GB); SIBSON DAVID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           h 8.5%;
Similarity 99.3%;
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1. .377
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69 c 68 g
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93.8%;
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Pred. No. 4.2e-50;
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Matches 285;
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Sequence 240 from Patent
A77533
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Sibson,D.R. and Hadfield,K.M.
HUMAN NUCLEIC ACID FRAGMENTS ISOLATED FROM BRAIN, ADRENAL TISSUE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Patent: EP 0587279-A 240 16-MAR-1994; MEDICAL RES COUNCIL (GB)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             unidentified
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             January 17,
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/db_xref="taxon:32644"
69 c 68 g 8
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                                                                                                                                                                                                                                                                                                                                                                                                                    93.8%;
             2002,
                                                                                                                                                                                                                                                                                                                                                                                                       Score 269.2; DB 6
Pred. No. 1.1e-46;
0; Mismatches 18
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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
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Maximum DB seq length: 2000000000
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Perfect score:
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3365
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Gapop 10.0 , Gapext 1.0
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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ALIGNMENTS

source	FEATURES		AUTHORS TITLE JOURNAL COMMENT	VERSION KEYWORDS SOURCE ORGANISM	RESULT 1 BF337464 LOCUS DEFINITION ACCESSION
/ 1035 /organism-"Homo sapiens" /db_xref="taxon:9606" /clone="IMAGE:4183126" /clone_lib="NCI_CGAP_Brn64" /tissue_type="glioblastoma with EGFR amplification"	Plate: LLAM9498 row: n column: 23 High quality sequence start: 5 High quality sequence stop: 695. Location/Qualifiers	Tissue Procurement: David N. Louis, M.D. CDNA Library Preparation: Life Technologies, Inc. CDNA Library Arrayed by: The I.A.G.E. Consortium (LLNL) DNA Sequencing by: Incyte Genomics, Inc. Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:	I (Mases i to 1035) NIH-MGC http://mgc.nci.nih.gov/. National Institutes of Health, Mammalian Gene Collection (MGC) Unpublished (1999) Contact: Robert Strausberg, Ph.D. Fmail: cnabs-:Masil nih dov	BF337464.1 GI:11283715 EST. human. homo sapiens Homo sapiens Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Eukaryota; Eutheria; Primates; Catarrhini; Hominidae; Homo.	BF337464 1035 bp mRNA EST 22-NOV-2000 602035195F1 NCI_CGAP_Brn64 Homo sapiens cDNA cione 1MAGE:4183126 BF337464

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/note="Organ: brain; vector: pCMV-SPORT6; Site_1:
Site_2: Sall; Cloned unidirectionally. Primer: Ol
Average insert size 1.57 kb. Constructed by Life
Technologies. Note: this is a NCI_CGAP Library."
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ATGGGCAGTGATTCAGGCACCATGGGAAGTGATTCAGATGAAGAGAATGTGGCAGCAAGA
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NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
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/note="Organ: small intestine; Vector: pCMV-SPORT6;
Site_1: Not1; Site_2: Sal1; Cloned unidirectionally;
oligo-dT primed. Average insert size 1.767 kb. Library
enriched for full-length clones and constructed by Life
Technologies, Note: this is a NIH_MGC Library."
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/clone="IMAGE:4397083"
/clone_lib="NIH_MGC_88"
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   gtttgagaacgctcatgatgaatatctccaactgctgaacctccttcag-cccactctgg
                                                             cggcagccctctggccgcccgctacatgaaccctgagctcacggacttgccctctccatc 485
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BG741146
BG741146.1 GI:
                                                                                                                                                                                                                                                                                                                                                                                                            Email: cgapbs-r@mail.nih.gov
Tissue Procurement: James Cleaver, M.D.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLN
Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information
found through the I.M.A.G.E. Consortium/LLNL at:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BG741146 827 bp mrna
602631817F1 NCI_CGAP_Skn3 Homo
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1 (bases 1 to 827)
NIH MGC http://mgc.nci.nih.gov/.
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Plate: LLAM10630 row: b column:
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                                                                                                         Conservative
                                                                                                                                                                                     /organism="Homo sapiens"
/odb_xref="taxon:9606"
/clone="MAGE:4776869"
/clone="Ib="NOI_CGAP_Skn3"
/lab_host="DH10B (T1 phage-resistant)"
/note="organ: skin; Vector: pCMV-SPORT6; Site_1: NotI;
Site_2: Sall; Cloned unidirectionally. Primer: Oligo dT.
Average insert size 1.5kb. Library constructed by Life
Technologies. Note: this is a NCI_CGAP Library."
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96.1%;
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Pred. No. 8.2e-124;
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                                                                                                 Eukaryoia; Metazoa; Chordata; Craniata; Mammalia; Eutheria; Primates; Catarrhini l (bases 1 to 781)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian
                                             Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
                                                                                                                                                                                                          BF686405.1
EST.
                                                                                                                                                                                                                                                                BF686405 781 bp
602143786F1 NIH_MGC_46
                                                                          Contact: Robert Strausberg, Ph.D
                                                                                         Unpublished (1999)
                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                         BF686405
                                                                                                                                                                                                                                                    mRNA sequence.
CDNA Library Preparation: Ling Hong/Rubin Laboratory CDNA Library Arrayed by: The I.M.A.G.E. Consortium () DNA Sequencing by: Incyte Genomics, Inc.
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                     agtcttggacataacag-caacatgggcagtgattcaggcaccatgggaagtgattcaga
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                                                                                          Clone distribution: MGC clone distribution information can found through the I.M.A.G.E. Consortium/LLNL at: http://imaqe.llnl.gov Plate: LLCM1170 --
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/lab_host="DH10B (phage resistant)"
/note="organ: uterus; Vector: pOTB; Site_1: XhoI; Site_2:
EcoRI; cDNA made by oliqo-dT priming. Directionally cloned
into EcoRI/XhoI sites using the following 5' adaptor:
GCACGAC(G). Size-selected >500bp for average insert size
1.8kb. Library constructed by Ling Hong in the laboratory
of Gerald M. Rubin (University of California, Berkeley)
using ZAP-cDNA synthesis kit (Stratagene) and Superscript
II RT (Life Technologies). Note: this is a NIH_MGC
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/clone_11b="NIH_MGC_46"
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/db_xref="taxon:9606"
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Pred. No. 1.3e-123;
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aaatgttgaaaaggctggctgaaaacccagaatatgaaaatgaaaagctgaccaaattaa
                                                    aacctttgaaactggatgaaacagatagatttctcatgactttattttttgaaaacaata
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Contact: Robert Strausberg, Ph.D. Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
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NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collections
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Clone distribution: MCC clone distribution information can
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/clone_lib="NIH_MGC_71"
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/lab_host="DH10B (phage-resistant)"
/note="organ: uterus; vector: pCMV-SPORT6;
Site_2: Sall: Cloned unidirectionally. Pri
Average insert size 2.1 kb.
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Shibata, K., Itoh, M., Aizawa, K., Nagaoka, S., Sasaki, N., Carninci, P., Konno, H., Akiyama, J., Nishi, K., Kitsunai, T., Tashiro, H., Itoh, M., Sumi, N., Ishii, Y., Nakamura, S., Hazama, M., Nishine, T., Harada, A., Yamamoto, R., Matsumoto, H., Sakaguchi, S., Ikegami, T., Kashiwagi, K., Fujiwake, S., Inoue, K., Togawa, Y., Izawa, M., Ohara, E., Watahiki, M., Yoneda, Y., Ishikawa, T., Ozawa, K., Tanaka, T., Matsuura, S., Kawai, J., Okazaki, Y., Muramatsu, M., Inoue, Y., Kira, A. and Hayashizaki, Y., Okazaki, Y., Muramatsu, M., Inoue, Y., Kira, A. and Hayashizaki, Y., Okazaki, Y., Shikawa, T., Okazaki, Y., Shikawa, T., Matsuura, S., Kawai, J., Okazaki, Y., Muramatsu, M., Inoue, Y., Kira, A. and Hayashizaki, Y., Okazaki, Y., Shikawa, T., Okazaki, Y., Shikawa, T., Okazaki, Y., Shikawa, T., Watsuura, S., Kawai, J., Okazaki, Y., Watsuura, S., Kawai, J., Okazaki, Y., Shikawa, T., Ozawa, K., Tanaka, T., Matsuura, S., Kawai, J., Okazaki, Y., Shikawa, T., Ozawa, K., Tanaka, T., Matsuura, S., Kawai, J., Okazaki, Y., Shikawa, T., Ozawa, K., Tanaka, T., Matsuura, S., Kawai, J., Okazaki, Y., Shikawa, T., Ozawa, K., Tanaka, T., Matsuura, S., Kawai, J., Okazaki, Y., Shikawa, T., Ozawa, K., Tanaka, T., Matsuura, S., Kawai, J., Okazaki, Y., Shikawa, T., Ozawa, K., Tanaka, T., Matsuura, S., Kawai, J., Okazaki, Y., Shikawa, T., Watsuura, S., Kawai, J., Okazaki, Y., Shikawa, T., Ozawa, K., Tanaka, T., Matsuura, S., Kawai, J., Okazaki, Y., Shikawa, Sh
                                                                                                                                                                                                                                                                                                                                                                                Normalization and subtraction of cap-trapper-selected cDNAs to prepare full-length cDNA libraries for rapid discovery of new genes Genome research. 10 (10), 1617-1630 (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2 (bases 1 to 1197)
Carninci, P., Shibata, Y., Hayatsu, N., Sugahara, Y., Shibata, K., Itoh, M., Konno, H., Okazaki, Y., Muramatsu, M. and Hayashizaki, Y.
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Mus musculus adult male cecum cDNA, RIKEN full-length
library, clone:9130009C22, full insert sequence.
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High-efficiency full-length cDNA cloning
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sasaki,D., Shibata,K., Shibata,Y., Shinagawa,A., Shiraki,T., Sogabe,Y., Suzuki,H., Tagami,M., Tagawa,A., Takahashi,F., Tanaka,T., Tejima,Y., Toya,T., Yamamura,T., Yasunishi,A., Yoshida,K., Yoshino,M., Muramatsu,M. and Hayashizaki,Y.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cDNA library was prepared and sequenced in Mouse Genome Encyclopedia Project of Genome Exploration Research Group in Riken Genomic Sciences Center and Genome Science Laboratory in RIKEN. Division of Experimental Animal Research in Riken contributed to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Submitted (10-JUL-2000) Yoshihide Hayashizaki, The Institute Physical and Chemical Research (RIKEN), Laboratory for Genome
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Please visit our web site (http://genome.gsc.riken.go.jp/) for further details.
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                                          /note="putative"
214 c 256
                                                                                                                   /note="putative"
1197
                                                                                                                                                                                                                                              RVQNMKPEEYAHKILELQVQSILEKKMKVERSIAKQYNDNPSLITLLCKNCSMLVCSG
ENIHVIEKMHHVNMTPEFKGLYIVRENKALQKKFADYQTNGEIICKCGQAWGTMMVHK
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/protein_id="BAB31303.1"
/db_xref="G1:12858394"
/translation="MVQARGRARADESTYVLVTSSGSGVTEREIVNDFREKMMYKAIN
                                                                                                                                                                                                                  GLDLPCLKIRNFVVNFKNNSPKKQYKKWVELPIRFPDLDYSEYCLYSDED*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /dev_stage="adult"
105. .737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /tissue_type="cecum"
/clone_lib="RIKEN_full-length enriched mouse cDNA library"
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/db_xref="MGD:MGI:1904143"
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/strain="C57BL/6J"
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                                                                                                                                     A1718277 536 bp mRNA as51e06.xl Barstead aorta HPLRB6 IMAGE:2320738 3', mRNA sequence.
Homo sapiens
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Query Match
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                      acatttcccaatcttgactattcagaatgctqtttatttagtgatgaggattagcacttq
                                                                                                                      gtcaatatgaccccagaattcaaggaactttacattgtaagagaaaacaaagcactgcaa
                                                                                                                                                                                                                    ggaacaatgalgqtgcacaaaggctlaqatttgcctlgtctcaaaataaggaattttgta
                                                                                                                                                                                                                                                                                                                                                                                             aactgcagtgtgctagcctgttctggggaaqatatccatgtaattgagaaaatgcatcac 2952
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                                                                                                                                                                                                                                                                                                                      aagaagtgtgccgactalcaaataaatggtgaaatcatctgcaaatgtggccaggcttgg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ### ARCTGCAGTGTGCTAGCCTGTTCTGGGGAAGATATCCATGTAATTGAGAAAATGCATCAC
\tt GTGGTTTTCAAAAATAATTCAACAAAGAAACAATACAAAAAGTGGGTAGAATTACCTATC
                                                                                                                                                                                                GGAACAATGATGGTGCACAAAGGCTTAGATTTGCCTTGTCTCAAAAATAAGGAATTTTGTA
                                                                                                                                                                                                                                                                                             AAGAAGTGTGCCGACTATCAAATAAATGGTGAAATCATCTGCAAATGTGGCCAGGCTTGG
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Mammalla; Eutheria; Primates; Catarrhini; Hominidae;
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Contact: Wilson RK
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Tel: 314 286 1800
Fax: 314 286 1810
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Tel: 314 286 1800
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
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a 93 c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3']; double-stranded cDNA was ligated to Eco RI adaptors [5' AATTCGGATCGAAC 3' and 5' GTTGGATCGG 3'], digested with Not I and cloned into the Not I and Eco RI sites of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              the modified pT7T3 vector. Library constructed by Bob
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/clone="IMAGE:2320738"
/clone_lib="Barstead aorta HPLRB6"
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3012 aaagaagtgtgccgactatcaaataaatggtgaaatcatctgcaaatgtggccaggcttg 3071
                                                                                                                      2832 caagagaaatattgccaagcattacaagaataacccatcactaataactttcctttgcaa 2891
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                                          CGTCAATATGACCCCAGAATTCAAGGAACTTTACATTGTAAGAGAAAACAAAAACACTGCA 359
                                                                                  cgtcaatatgaccccagaattcaaggaactttacattgtaagagaaaacaaagcactgca 3011
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NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
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AI806204.1 GI:5392770
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                                                                                                                                                                                                                                                                                            Conservative
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/lab_host="DH10B"
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/db_xref="taxon:9606"
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521 AGCATTACAAGAATAACCCATCACTAATAACTTTCCTTTGCAAAAACTGCAGTGTGCTAG 462

Query Match Best Local Matches 516;

Similarity

Conservative

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RESULT 9
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AUTHORS
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                                                                                                                                                                                                                                                                                                                                                                                                                                DNA Sequencing by: Washington University Genome Sequencing Center Clone distribution: NCI-CGAP clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         wollf08.x1 NCI_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2455047 3',
                                                                                                                                                                                                                                                                                                                                                                                          www-bio.llnl.gov/bbrp/image/image.html
Seq primer: -40UP from Gibco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Life Technologies catalog #: 11548-013
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unpublished (1997)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mammalia; Eutheria; Primates; Catarrhini; Hominidae;
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                                                                                                   /note="Organ: pancreas; Vector: pCMV-SPORT6; Site_1: SalI; Site_2: NotI; Cloned unidirectionally. Primer: Oligo dT. Average insert size 1.72 kb. Life Technologies catalog #: 11548-013" 82 g 195 t
                                                                                                                                                                                                                                               /db_xref="taxon:9606"
/clone="IMAGE:2455047"
/clone_lib="NCI_CGAP_Pan1"
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/lab_host="DH10B"
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                                                                                                                                                                                                                                                                                                                                                   Hillier, L., Lennon, G., Becker, M., Bonaldo, M.F., Chiapelli, B., Chissoe, S., Dietrich, N., DuBuque, T., Favello, A., Gish, W., Hawkins, M., Hultman, M., Kucaba, T., Lacy, M., Le, M., Le, M., Mardis, E., Moore, B., Morris, M., Parsons, J., Prange, C., Rifkin, L., Rohlfing, T., Schellenberg, K., Soares, M.B., Tan, F., Thierry Meg, J., Trevaskis, E., Underwood, K., Wohldmann, P., Waterston, R., Wilson, R. and Marra, M. Generation and analysis of 280,000 human expressed sequence tags Genome Res. 6 (9), 807-828 (1996)
                                                                                                                                                                                                                                                           Washington University School of Medicine 4444 Forest Park Parkway, Box 8501, St. 1 Tel: 314 286 1800
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        zo23f04.sl Stratagene colon (#937204) Homo IMAGE:587743 3', mRNA sequence.
                                                                                                                                                                                                This clone is available royalty-free through LLNL;
                                                                                                                                                                                                                                                                                                                       Contact: Wilson RK
                                                                                                                                                                                                                                                                                                                                           97044478
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                                                                                                                                                         IMAGE Consortium (info@image.llnl.gov) for further information. Seq primer: -40M13 fwd. from Amersham
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                                                                                                                                                                                                                                       314 286 1800
314 286 1810
                                                                                                                                           quality sequence stop: 278
                                                                                                                                                                                                                      est@watson.wustl.edu
/organism."Homo sapiens"
/db_xef.="GDB:4620045"
/db_xref.='taxon:9606"
/clone="IMAGE:587743"
/clone_lib-"Stratagene co.
                                                                               /organism-"Homo
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BE940626
           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhin; Hominidae; Homo. I (bases 1 to 546)

Dias Neto,E., Garcia Correa,R., Verjovski-Almeida,S., Briones,M.R., Nagai,M.A., da Silva,W. Jr., Zaqo,M.A., Bordin,S., Costa,F.F., Ragai,M.A., da Silva,W. Jr., Zaqo,M.A., Bordin,S., Costa,F.F., Goldman,G.H., Carvalho,A.F., Matsukuma,A., Baia,G.S., Simpson,D.H., Brunstein,A., deOliveira,P.S., Bucher,P., Jongeneel,C.V., O'Hare,M.J., Soares,F., Brentani,R.R., Reis,L.F., de Souza,S.J. and
Simpson, A.J.
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                                                                                                                                                                       Homo sapiens
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/cell_line="TB4 carcinoma cell line"
/lab_host="SOLR cells (kanamych resistant)"
/note="Organ: colon; Vector: pBluescript SK-; Site_l:
/note="Organ: colon; Cloned unidirectionally. Primer:
ECORI; Site_2: XhoI; Cloned unidirectionally. Primer:
Oligo dT. T-84 colonic epithelial cell line. Average
insert size: 1.0 kb; Uni ZAP XR Vector; .5' adaptor
sequence: 5' GAATTCGGCACGAG 3' -3' adaptor sequence: 5'
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a 97 c 90 g 206 t 2 others
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                                                                                                                                                                                                                                                                                                                                                                                                            aagattottttaaaaataotatoagttaaaoatttaatatgattatgattaatgtat 3312
                                                                     ttcccaatcttgactattcagaatgctgtttatttagtgatgaggattagcacttgattg 3256
                                                                                                                                            ttttcaaaaataattcaacaaagaaacaatacaaaaagtgggtagaattacctatcacat 3196
                                                                                                                                                                                              CAATGATGGTGCACAAAGGCTTAGATTTGCCTTGTCTCAAAATAAGGAATTTTGTAGTGG
                                                                                                                                                                                                                 caatgatggtgcacaaaggcttagatttgccttgtctcaaaataaggaattttgtagtgg 3136
                                                                                                                                                                                                                                                                                      agtgtgccgactatcaaataaatggtgaaatcatctgcaaatgtggccaggcttggggaa 3076
                                                                                                                                                                                                                                                                                                                                          ATATGACCCCAGAATTCAAGGAACTTTACATTGTAAGAGAAAACAAAGCACTGCAAAAGA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gaaatattgccaagcattacaagaataacccatcactaataactttcctttgcaaaaact 2896
                                                  TTCCCAATCTTGACTATTCAGAATGCTGTTTATTTAGTGATGAGGATTAGCACTTGATTG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCATCAGATTTTGGAATTACAGATGACAAGTATAATGGAACAAGAAAATGAAAACCAAGA 70
                                                                                                                         TTTTCAAAAATAATTCAACAAAGAAACAATACAAAAAGTGGGTAGAATTACCTATCACAT 429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    530;
This sequence was derived from the FAPESP/LICR Human Cancer Genome Project. This entry can be seen in the following URL (http://www.ludwig.org.br/scripts/gethtml2.pl?tl=&t2=RC3-UT0064-170 800-021-e06&t3=2000-08-17&t4=1)
Seq primer: puc 18 forward
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Ludwig Institute for Cancer Research
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Fax: +55-11-2707001
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/dev_stage="Adult"
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Query Match
Best Local
                       3072 gggaacaatgatggtgcacaaaggcttagatttgccttqtctcaaaataaggaattttgt 3131
                                                                                                                                                                                                                       2952 cgtcaatatgaccccagaattcaaggaactttacattgtaagagaaaacaaagcactgca 3011
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        www-bio.llnl.gov/bbrp/image/image.html
Seq primer: -40UP from Gibco
High quality sequence stop: 175.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Email: cgapbs-r@mail.nih.gov
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /tissue_type="serous papillary carcinoma, high grade,
pooled tumors"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Christopher Moskaluk, M.D.,
Emmert-Buck, M.D., Ph.D.
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National Cancer Institute, Cancer Genome Anatomy
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                                                                                                                                                                                                       Possible reversed clone: polyT not found Seq primer: -40UP from Gibco
                                                                                                                                                                                                                                                                          cDNA Library Preparation: Life Technologies, Inc. cDNA Library Arrayed by: Greg Lennon, Ph.D.
DNA Sequencing by: Washington University Genome Sequencing Center Clone distribution: NCI-GAP clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
                                                                                                                                                                                                                                                                                                                                                                      Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Christopher Moskaluk, M.D., Ph.D.,
Emmert-Buck, M.D., Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 475)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AW589567 475 bp mRNA EST 22-MAR-2000 x012b12.x1 NCI_CGAP_Ut3 Homo sapiens cDNA clone IMAGE:2703743 similar to TR:095786 095786 RNA HELICASE. ;, mRNA sequence.
                                                                                                                                                               High quality sequence stop: 407.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                  Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unpublished (1997)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NCI-CGAP http://www.ncbi.nlm.nih.gov/nciegap
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                                      adenocarcinoma,
                                               /clone="IMAGE:2703743"
/clone_lib="NCI_CGAP_Ut3"
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_____ulf
_____cinomā, 2 pooled
/lab_host="DH10B"
                                                                                                             /organism="Homo sapiens"
/db_xref="taxon:9606"
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                                                                                                                         Contact: Robert Strausberg, Ph.D.
Email: cgapbs-remail.nih.gov
Tissue Procurement: Chris Moskaluk, M.D., Ph.D., Michael
Emmert-Buck, M.D., Ph.D.
                                                                                                                                                                                                                                                                          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 479)
                                                                                                                                                                                                    Tumor Gene Index
Unpublished (1997)
                                                                                                                                                                                                                                                                                                                                 Homo sapiens
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                 info@image.llnl.gov
                                  found through the I.M.A.G.E. Consortium/LLNL,
                                                                                                                                                                                                                                        National Cancer Institute, Cancer
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                                                 CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Washington University Genome Sequencing Center
Clone distribution: NCI-CGAP clone distribution information can be
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-40UP from Gibco
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100.0%;
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                                    send email to:
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                                  attatgctacagaactgacataagaatcaataaaatgattgttttactctg 3365
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470; Conserv
                                                                        TGAAGATTCTTTTAAAAATACTATCAGTTAAACATTTAATATGATTATGATTAATGTATTC
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Location/Qualifiers
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/note="Organ: breast; Vector: pCMV-SPORT6; Site_1: NotI;
Site_2: SalI; Cloned unidirectionally. Primer: Oligo dT.
Average insert size 1.5 kb. Constructed by Life
Technologies."
71 g 179 t
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/clone="IMAGE:3645354"
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